

SEQUENCE LISTING

<110> Travis, James

Potempa, Jan S

Banbula, Agnieszka

<120> Dipeptidylpeptidases And Methods Of Use

<130> 235.00440101

<150> US 60/246,827

<151> 2000-11-08

<160> 26

<170> PatentIn version 3.0

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<212> PRT

<213> Porphyromonas gingivalis

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Gln Glu Leu Ala Lys Lys Glu Asn Ala Asp Glu Asn Gln Leu Cys Ile
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Val Phe Lys Asp Val Arg Met Val Phe Ala Pro Pro Ser Ser Val Gly
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Lys Phe Gly Gly Asp Thr Asp Asn Trp Met Trp Pro Arg His Thr Gly
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245 250 255
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Phe Pro Gly Ser Thr Asp Arg Tyr Leu Thr Ser Trp Gly Val Glu Asp
275 280 285
Arg Ile Glu Asn Glu Asn Asn Pro Arg Ile Glu Val Arg Gly Ile Lys
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Gln Gly Ile Trp Lys Glu Ala Met Ser Ala Asp Gln Ala Thr Arg Ile
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Lys Tyr Ala Ser Lys Tyr Ala Gln Ser Ala Asn Tyr Trp Lys Asn Ser
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Ile Gly Met Asn Arg Gly Leu Ala Arg Leu Asp Val Ile Gly Arg Lys
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 Arg Ala Glu Glu Arg Ala Phe Ala Asp Trp Ile Arg Lys Asn Gly Lys
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 Ser Ala Val Tyr Gly Asp Val Leu Ser Ser Leu Glu Lys Ala Tyr Lys
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 Glu Gly Ala Lys Ala Asn Arg Glu Met Thr Tyr Leu Ser Glu Thr Leu
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 Ala Thr Asn Pro Asp Ala His Ala Gly Ile Leu Lys Ser Leu Asp Asp
 420 425 430
 Lys Tyr Lys Asp Tyr Leu Pro Ser Leu Asp Arg Lys Val Leu Pro Ala
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 Tyr Ala Asp Phe Val Phe Asp Lys Ser Val Val Pro Tyr Ser Asp Lys
 485 490 495
 Phe His Ala Met Leu Lys Ser Met Asp Lys Glu Lys Phe Ala Lys Ala
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 Ile Glu Lys Asp Pro Ala Val Glu Leu Ser Lys Ser Val Ile Ala Ala
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 Ala Arg Ala Ile Gln Ala Asp Ala Met Ala Asn Ala Tyr Ala Ile Glu
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 Arg Ala Leu Pro Ser Asp Ala Asn Phe Thr Met Arg Met Ser Tyr Gly
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 Thr Thr Gly Lys Gly Val Leu Glu Lys Gln Asp Pro Lys Ser Asp Glu
 595 600 605
 Phe Ala Val Gln Glu Asn Ile Leu Asp Leu Phe Arg Thr Lys Asn Tyr
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 625 630 635 640
 Asn Asp Ile Thr Gly Gly Asn Ser Gly Ser Pro Val Phe Asp Lys Asn
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 Gly Arg Leu Ile Gly Leu Ala Phe Asp Gly Asn Trp Glu Ala Met Ser
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Gly Asp Ile Glu Phe Glu Pro Asp Leu Gln Arg Thr Ile Ser Val Asp
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<213> Porphyromonas gingivalis

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<213> Staphylococcus aureus

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<210> 5

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<212> PRT

<213> Shewanella putrefaciens

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35 40 45
Asp Val Leu Lys Ala Lys Gly Leu Glu Ile Asp Ala Lys Ser Ile Ser
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Lys Leu Thr Glu Phe Pro Met Asn Ala Val Ile Ser Leu Gly Gly Cys
65 70 75 80
Thr Ala Ser Phe Val Ser Pro Lys Gly Leu Val Val Thr Asn His His
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Leu Gln Asp Gly Phe Leu Ala Lys Thr Phe Ala Asp Glu Leu Pro Ala
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Glu Arg Val Lys Ala Gly Leu Glu Asn Lys Thr Gly Arg Glu Phe Tyr
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Gln Gly Val Glu Asn Gln Glu Lys Ala Leu Val Ala Glu Cys Glu Lys
165 170 175
Asp Glu Gly Tyr Arg Cys Gln Val Tyr Ser Phe His Gly Gly Leu Glu
180 185 190
Tyr Tyr Leu Val Lys Gln Leu Glu Ile Arg Asp Val Arg Leu Val Tyr
195 200 205
Asn Pro Ala Gly Ser Val Gly Lys Tyr Gly Gly Asp Val Asp Asn Trp
210 215 220
Met Trp Pro Arg His Thr Gly Asp Tyr Ser Phe Tyr Arg Ala Tyr Val
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Ser Lys Asn Gly Lys Pro Ala Glu Phe Ser Ala Asp Asn Val Pro Tyr
245 250 255
Glu Pro Lys Ser Phe Leu Lys Val Ser Ala Lys Gly Val Ser Glu Gly
260 265 270
Asp Phe Val Met Val Ala Gly Tyr Pro Gly Arg Thr Asn Arg Tyr Arg
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Thr Ala Thr Glu Val Gln Asn Glu Phe Glu Trp Ala Tyr Pro Glu Gly
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Lys Met Leu Arg Glu Arg Phe Ile Glu Ile Ile Lys Ala Thr Ala Pro
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Glu Gly Ser Asp Glu Arg Ile Lys Tyr Glu Ser Gln Ile Ala Gly Leu
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 Ser Thr Met Leu Ala Asp Arg Lys Ala Leu Glu Ala Lys Leu Ala Glu
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 385 390 395 400
 Asp Met Ile Leu Ser Tyr Ile Ser Ser Thr Thr Met Leu Pro Thr Ala
 405 410 415
 Asn Asn Leu Tyr Arg Leu Ala His Glu Lys Gln Leu Pro Asp Met Gln
 420 425 430
 Arg Glu Pro Gly Phe Gln Asp Arg Asp Met Thr Arg Phe Lys Ala Ser
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 Met Glu Arg Ile Asp Arg Arg Tyr Ala Ala Ser Val Asp Lys Ala Val
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 Ala Lys Leu Ala Lys Thr Leu Asp Lys Met Tyr Ala Lys Thr Glu Leu
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 Gly Asn Lys Asp Val Arg Leu Ala Trp Met Glu Lys Ser Val Asp Asp
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 Phe Lys Ala Ser Lys Asp Pro Phe Ile Gln Phe Ala Val Ala Met Tyr
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 Asp Thr Asn Met Ser Glu Glu Lys Lys Glu Lys Glu Leu Asp Gly Glu
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 Leu Met Lys Val Arg Pro Gln Tyr Met Asp Ala Ile Ile Ala Tyr Asn
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 Leu Glu Gln Gly Lys Pro Val Tyr Ala Asp Ala Asn Ser Ser Leu Arg
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 Val Thr Val Gly His Val Lys Gly Tyr Ser Pro Lys Asp Gly Leu Val
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 Ala Val Pro Phe Thr Arg Leu Glu Gly Ile Val Gln Lys Asp Thr Gly
 610 615 620
 Ile Asp Pro Phe Asp Ala Pro Lys Gln Gln Leu Glu Leu Ile Lys Gln
 625 630 635 640
 Lys Gln Tyr Gly Asp Phe Tyr Met Lys Ser Ile Asp Ser Val Pro Val
 645 650 655

Asn Phe Leu Ser Thr Leu Asp Thr Thr Gly Gly Asn Ser Gly Ser Pro
660 665 670
Thr Leu Asn Gly Arg Ala Glu Leu Val Gly Leu Leu Phe Asp Gly Val
675 680 685
Tyr Glu Ser Ile Ile Gly Gly Trp Ala Phe Asp Asn Glu Ile Asn Arg
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<210> 6

<211> 732

<212> PRT

<213> Shewanella putrefaciens

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35 40 45
Asp Leu Thr Ser Tyr Pro Met Asn Ala Val Val Gly Leu Gly Tyr Cys
50 55 60
Thr Ala Ser Phe Val Ser Pro Gln Gly Leu Val Val Thr Asn His His
65 70 75 80
Cys Ala Tyr Lys Ala Ile Gln Tyr Asn Thr Lys Lys Glu His Asn Tyr
85 90 95
Leu Glu Gln Gly Phe Leu Ala Thr Ser Met Asp Lys Glu Pro Ser Ala
100 105 110
Gly Pro Asn Glu Arg Leu Tyr Ile Thr Glu Ala Val Thr Asp Val Thr
115 120 125
Ser Asp Val Thr Lys Asp Leu Ser Gln Asp Pro Leu Lys Arg Tyr Glu
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Glu Ile Glu Asn His Ser Lys Ala Leu Ile Lys Ser Cys Glu Ala Asp
145 150 155 160
Asp Asn Tyr Arg Cys Asn Val Arg Ser Phe His Asn Gly Leu Glu Tyr
165 170 175
Tyr Leu Ile Lys Gln Leu Met Ile Arg Asp Val Arg Leu Val Tyr Ala
180 185 190
Pro Pro Glu Ser Val Gly Gly Tyr Gly Gly Asp Ile Asp Asn Tyr Glu
Page 8

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 Ser Val Ser Ser Asn Trp Val Phe Asp Pro Val Met Thr Arg Thr Ile
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<210> 8

<211> 699

<212> PRT

<213> Porphyromonas gingivalis

<400> 8

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35 40 45
Leu Pro Leu Asp Ser Leu Tyr Ser Phe Asp Lys Pro Ser Ile Ala Asn
50 55 60
Ala Val Val Ile Phe Gly Gly Gly Cys Thr Gly Ile Thr Val Ser Asp
65 70 75 80
Gln Gly Leu Ile Phe Thr Asn His His Cys Gly Tyr Gly Ala Ile Gln
85 90 95
Ser Gln Ser Thr Val Asp His Asp Tyr Leu Arg Asp Gly Phe Val Ser
100 105 110
Arg Thr Met Gly Glu Glu Leu Pro Ile Pro Gly Leu Ser Val Lys Tyr
115 120 125
Leu Arg Lys Ile Val Lys Val Thr Asp Lys Val Glu Gly Gln Leu Lys
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Gly Ile Thr Asp Glu Met Glu Arg Leu Arg Lys Ala Gln Glu Val Cys
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Gln Glu Leu Ala Lys Lys Glu Asn Ala Asp Glu Asn Gln Leu Cys Ile
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Val Glu Pro Phe Tyr Ser Asn Asn Glu Tyr Phe Leu Ile Val Tyr Asp
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Val Phe Lys Asp Val Arg Met Val Phe Ala Pro Pro Ser Ser Val Gly
195 200 205
Lys Phe Gly Gly Asp Thr Asp Asn Trp Met Trp Pro Arg His Thr Gly
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245 250 255
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260 265 270
Phe Pro Gly Ser Thr Asp Arg Tyr Leu Thr Ser Trp Gly Val Glu Asp
275 280 285
Arg Ile Glu Asn Glu Asn Asn Pro Arg Ile Glu Val Arg Gly Ile Lys
290 295 300
Gln Gly Ile Trp Lys Glu Ala Met Ser Ala Asp Gln Ala Thr Arg Ile
305 310 315 320

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Phe	Ala 610	Val	Gln	Glu	Asn	Ile 615	Leu	Asp	Leu	Phe	Arg 620	Thr	Lys	Asn	Tyr
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<212> PRT

<213> Porphyromonas gingivalis

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Arg Lys Tyr Ala Gln Met Lys Glu Arg Gly Leu Lys Met Lys Glu Tyr
 35 40 45

Asp Leu Tyr Asn Pro Asn Gly Thr Ser Leu Lys Asp Ala Val Val Leu
 50 55 60

Phe Asp Gly Gly Cys Thr Gly Glu Val Val Ser Asp Arg Gly Leu Val
 65 70 75 80

Leu Thr Asn His His Cys Gly Tyr Asp Met Ile Gln Ala His Ser Thr
 85 90 95

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Glu Asp Val Thr Asp Tyr Val Lys Lys Asp Leu Lys Ala Ile Lys Asp
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Pro Asn Ser Met Asp Tyr Leu Ser Pro Lys Tyr Leu Gln Lys Leu Ala
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Lys Lys Thr Tyr Thr Asp Val Arg Leu Val Gly Ala Pro Pro Thr Ser
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Ile Gly Lys Phe Gly Ala Asp Thr Asp Asn Trp Ile Trp Pro Arg His
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Pro Ala Pro Tyr Ser Glu Asp Asn Val Pro Leu Lys Pro Lys Arg Phe
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Met Gly Phe Pro Gly Thr Thr His Arg Tyr Phe Thr Ala Ser Glu Val
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Asp Glu Trp Lys Ser Ile Asp Asn Asp Ile Arg Ile Arg Met Arg Asp
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Lys Ile Met Tyr Ser Ala Lys Tyr Ala Ala Ser Gln Asn Ala Tyr Lys
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Ala Lys Arg Ala Asp Leu Arg Arg Arg Tyr Trp Met Ile Glu Glu Gly
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 Tyr Glu Arg Lys Asp Phe Gly Arg Tyr Ala Asp Arg Ser Gly Arg Met
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 Pro Val Ala Phe Cys Ala Thr Thr His Thr Thr Gly Gly Asn Ser Gly
 645 650 655
 Ser Pro Val Met Asn Ala Asn Gly Glu Leu Ile Gly Leu Asn Phe Asp
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